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FOOD ENGINEERING

STREET JOU
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TUESDAY, OCTOBER 20, 1987
Market Fallout
The bears ran wild on Wall Street in the stock market's worst one-day plunge ever. The reaction by market profes-sionals and traders was one of disbelief.
Stories include:
The Crash of
Stocks Plu
Amid Panic
The Big Crash
DJIA at 15 minute intervals
Friday's close 2246.74
of '29?

FOOD'S PERFORMANCE OVERSHADOWS WALL STREET LOSSES

ANNUAL STATE OF THE FOOD INDUSTRY

FOOD ENGINEERING

COVER STORY

If you were keeping score in 1987, it is plain to see that the food and beverage industry ended the year a winner, despite the curve ball the stock market hurled at the economy on October 19.

Pages 73 to 96

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This month's Report talks about the new cholesterol risk levels as defined by the National Cholesterol Education Program; product safety issues affecting the dairy industry; Borden's rise to increased market leadership through 51 acquisitions in the past year; and a rare glimpse into the operations of privately-held Cargill Inc.

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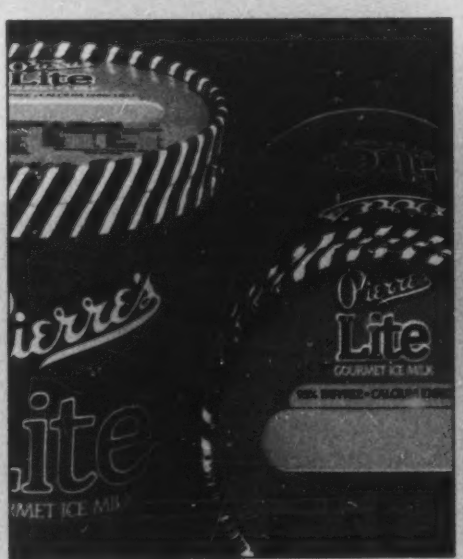

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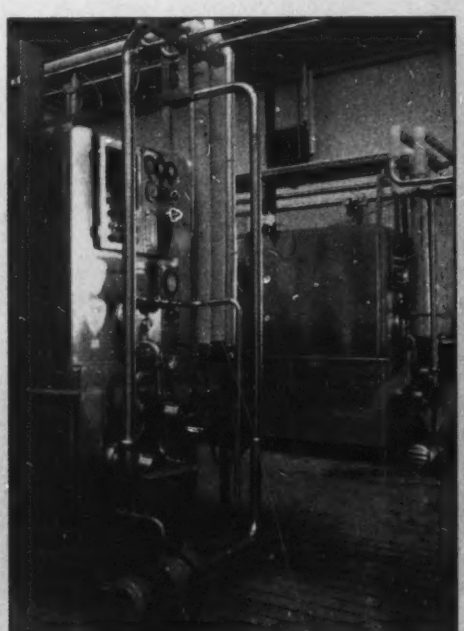

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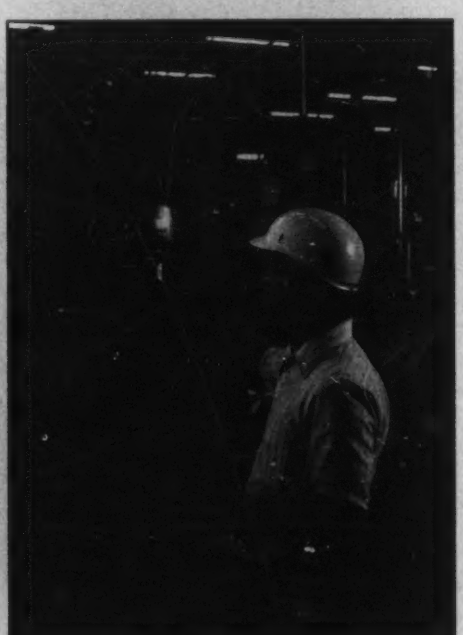

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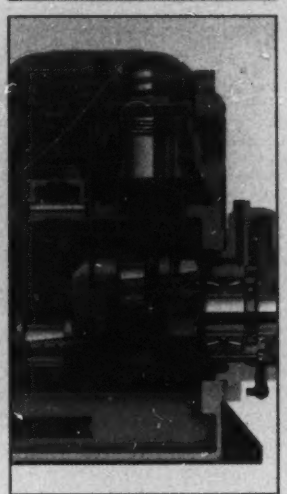

Special Emphasis

REFRIGERATION AND FREEZING

More and more refrigeration and freezing products have gained acceptance in the marketplace, as consumer demand for frozen products continues unabated.

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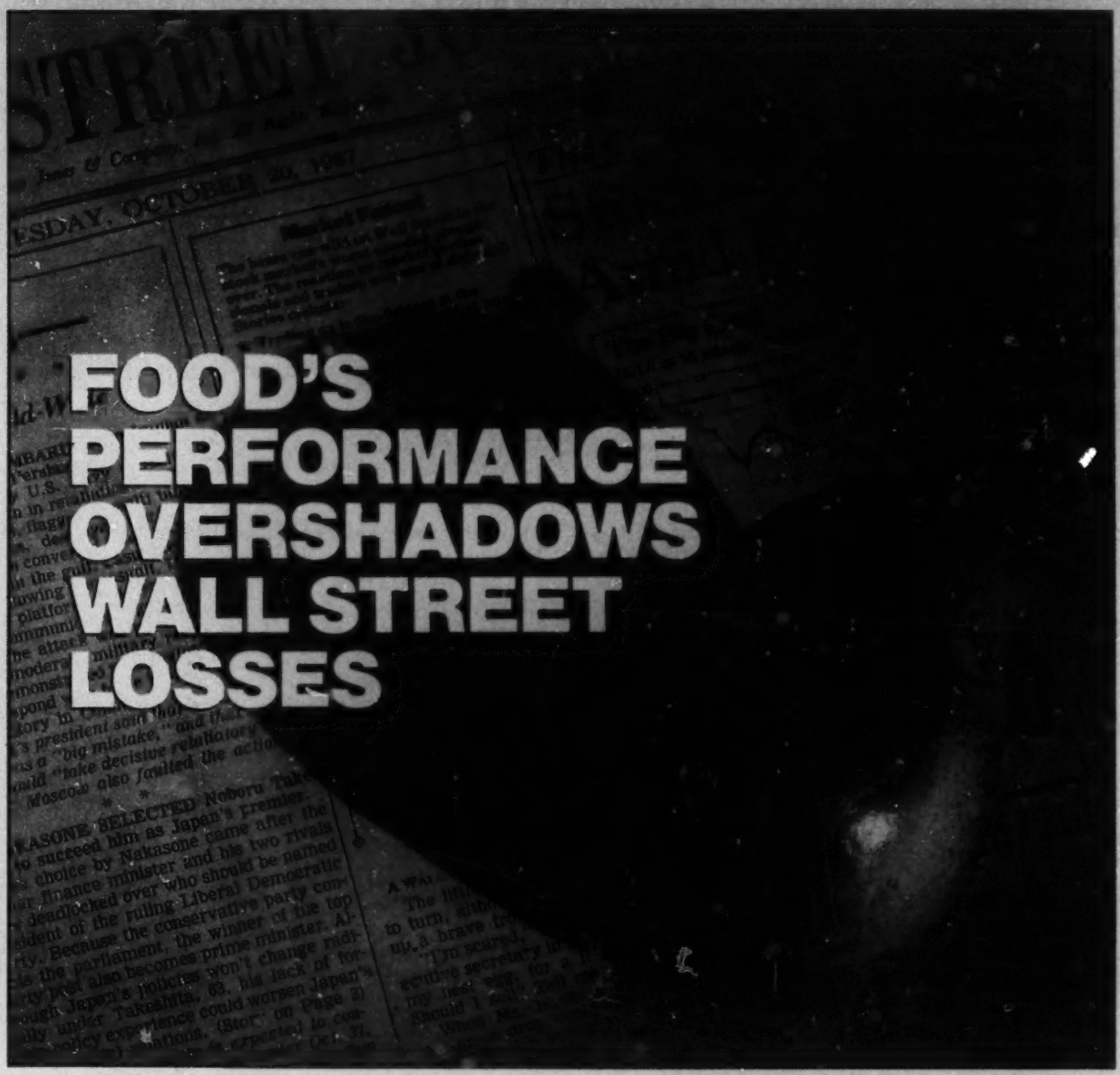
STATE OF THE FOOD INDUSTRY



FOOD'S PERFORMANCE OVERSHADOWS WALL STREET LOSSES

The shock waves of the October 19 stock market "adjustment" reverberated through the economy. The food industry weathered the storm well, feeling the effects much less than other industries, and appears to have positioned itself to withstand further economic downturn.

If you were keeping score in 1987, it is plain to see that the food and beverage industry ended the year a winner, despite the curve ball the stock market hurled at the economy on October 19. Call it what you will, "Meltdown Monday" or "Black Monday," the far-reaching effects of the calamitous dive of the Dow Jones industrial average that day was felt less in the food and beverage industry than in some other economic sectors.

Joyce Fassl, Managing Editor; Linda K. Freeman, Contributing Editor; Charles E. Morris, Midwest Editor; Ann E. Przybyla, Technical Editor; Margie Russell, Senior Associate Editor.

STATE OF THE FOOD INDUSTRY

The strength that saw the industry through the stock market "adjustment" will serve it well in 1988 when the economy is expected to continue its slow pace and many feel a recession sometime in '89 is almost unavoidable.

A year of modest growth

Despite the gyrations of the U.S. economy in the fourth quarter, the food and kindred products sector of the economy was able to realize a 1.7 percent growth rate in 1987, a feat not all sectors of the U.S. economy can claim. Growth was fairly uniform across the various industry categories within the sector, says the Department of Commerce in the U.S. Industrial Outlook 1988, with no one area booming, or showing significant decline.

Total personal consumption expenditures for all foods and beverages both at home and in restaurants increased 3.1 percent from 1986 to 1987, rising to $513 billion, according to the Outlook. Money expended for food and drink at home, however, grew only 1.7 percent to $339 billion. It was in personal consumption expenditures for restaurant meals and beverages where larger growth was realized. In 1987 there was a 6 percent increase (to $165 billion) over 1986. In a time when disposable income was tighter, Americans still continued to eat out.

Economic factors

How come the food industry didn't fall to its knees on October 19 when the stock market crash rocked the economy? There were a number of reasons, not the least of which was that the food industry had positioned itself well for a time of economic downturn. Economic conditions prior to the third quarter of 1987 helped the food industry hold its own. You couldn't call the year record-setting, but processors were able to raise their gross margins in spite of the market adjustment.

While it was true that food stock prices fell along with everything else on October 19, they rebounded after Black Monday. Harry Segalas, vice president and food analyst with Shearson Lehman Hutton in New York City, puts it this way: "In terms of the overview of the industry, one of the appealing aspects of the food companies is that these companies have a very high degree of earnings visibility in time of investor caution."

Tax reform certainly aided the processor, accounting for 20 to 30 percent after tax profit gains for the year. Although food prices didn't advance at the same rate as inflation, prices for commodities were lower which was also a boon to the processor. Branded processors, overall, continued to reap the rewards of a name known in the marketplace. The dollar value of a known brand name can't be written in a company's ledger, but its value cannot be underestimated.

Food expenditures compared against disposable personal income
(billions of current dollars)

Year	Disposable Personal Income	Food Expenditures	Percent
1966	$525.9	$109.0	20.7
1976	1252.6	236.2	18.8
1986	3022.1	497.8	16.5
1987	3181.5*	514.7*	16.2

*Preliminary
Source: Bureau of Economic Analysis; U.S. Department of Commerce

Looking ahead

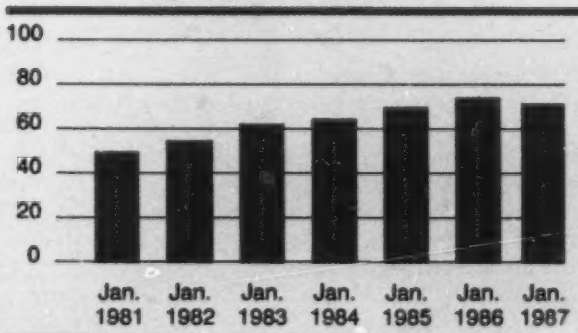
For the calendar year 1988, the Department of Commerce (DOC) is forecasting a better year than 1987. The DOC feels the aggregate real value of shipments by the 25 food and beverage industries covered in the U.S. Industrial Outlook for food and kindred products will increase about 2 percent, compared to less than 1.7 percent in real terms in 1987. This forecast is made despite many experts who feel that during the first six months of 1988 the economy will slow to less than a 1 percent real growth rate.

Why is it, then, with a forecast of weakness in the consumer sector of the economy and the prediction of slow growth overall, that the food industry is looking ahead with cautious optimism?

One reason is that through merger and acquisition activity the food industry has shed some of its periphery businesses and is moving back toward their core businesses. "When the downturn comes," says William Janis, an economist with the Department of Commerce, "they will be better prepared than had they remained conglomerates."

Another positive aspect is strong leadership in the food

Weekly family grocery expenses 1981-1987



Source: Food Marketing Institute, "Trends Update: 1987 Consumer Attitudes & the Supermarket

STATE OF THE FOOD INDUSTRY

Food products balance of trade 1985-1987
($ millions)

	Exports	Imports	Balance
1985	$10,254	$15,976	$-5,722
1986	$11,485	$16,500	$-5,015
1987*	$12,568	$18,862	$-6,294

*Estimated
Source: U.S. Industrial Outlook 1988

industry, seen as being able to lead the industry forward even in times of economic downturn. "There is very strong, decisive leadership," says food analyst Segalas. "They understand their business and have given tremendous commitment to building brands...building volumes...while being a low-cost producer."

An example of such leadership is found at H.J. Heinz where Anthony O'Reilly is at the helm. For 23 consecutive years Heinz has increased its earnings, and stockholders have realized a positive return since 1974. *Value Line Investment Survey,* published by Value Line, New York, NY, expects Heinz's stock to continue to outperform the market averages in 1988 and feels the stock is a good investment through 1992. Kellogg is another strong food industry presence, having increased its earnings for 36 years in a row.

The "R" Word

Although there is no clear consensus among U.S. economists, there is a lot of serious talk about the inevitability of a recession. It is generally thought that it will not take place in 1988, but rather in 1989, presenting a whole new set of economic challenges to the food industry. What is generally agreed upon is that the economy will experience sluggish growth in '88, with the first six months seen as being the weakest in the year. It is expected that corporate profits will be up just slightly and a moderate 3-4 percent inflation rate will prevail. Overall it is expected that the gross national product will grow by only 2 percent during the year. After adjustment for inflation, this reflects the slowest growth since 1982, significantly under the rate in 1987.

Can recession be far behind? The jury is still out, but is weighted heavily in the forecast that a recession is inevitable. The question is the timing. "It is going to happen," says Janis of the DOC, "the question is when."

But all is not lost. "The food industry should weather the next downturn much better than a lot of other non-durable goods sectors. If nothing else, people have to eat, and if you are focused on your core industries you are going to be able to withstand the downturn," says Janis.

Richard Knowlton, chairman, CEO and president of George A. Hormel Co. feels confident about how the industry would weather a recession: "The food industry has always come through these times. Some people will get hurt, but generally speaking, the food industry has done well during recessionary periods and will do so again."

Food stocks strong

Food stocks have long been felt to be good investments. *Value Line* predicts that 1988 will be the eighth consecutive year that food stocks outperform the market averages. *Value Line's* data shows food group earnings per share up 74 percent from their 1980 level.

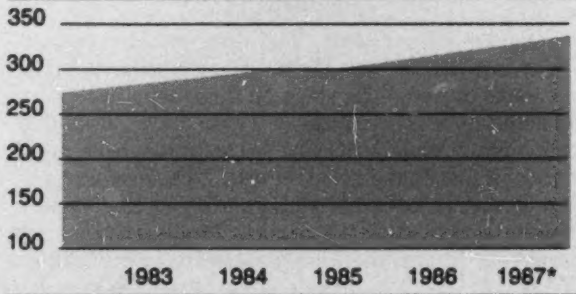
Segalas at Shearson Lehman Hutton shares *Value Line's* assessment of the strength of food stocks. Segalas feels that food stocks have had and will continue to have high earnings visibility, making them a good investment. "The pace of earnings will grow," says Segalas, "so we are going to see a growth of 10-14 percent on a nominal basis. With low tax rates, an increase of 15-20 percent is possible in 1988." Average return on equity is estimated to be in the 20-25 percent range, while Standard & Poor's stocks average about 15 percent, he says.

Mergers & acquisitions

One of the keys to the strength of food stocks and food industry finances is the strong viability of brand names. The industry has built up its brands over the years and is very conscious of the strength that lies in their recognition. In recent years one popular way to acquire a brand name and strengthen the company is through merger and acquisition.

In 1987 merger and acquisition activity continued at a rapid pace. Although the total number of transactions within the food industry was fewer in 1987 (599, as compared to 724 in 1986), the pace was still significant. Activity, says Frank Panyko, vice president, The Food Institute, "declined only temporarily when the stock market went

Food industry shipments 1983-1987
(in $ millions)



*Estimated
Source: U.S. Industrial Outlook 1988

down, but it was very heavy toward the end of the year. In fact, there were some bargains out there." Panyko sees the pace continuing through 1988, saying activity "could be higher than 1987."

Borden has made sixteen acquisitions in 1987, according to Food Institute data, acquiring such diverse names as "Soup Starter" and "Stew Starter" from Beatrice's Hunt-Wesson Division, Blue Channel, a canned crab meat packer, DeJean Packing, a canner of shrimp products, as well as the Prince Co., pasta producers, two dairy businesses, a juice concentrate processor, and the flavorings business of Sunkist Growers Coop of California. Bordens also acquired pasta producers in Italy and Brazil and a bakery firm in West Germany.

Beatrice and RJR Nabisco each sold off some of their operations. RJR divested itself of Heublein, Winchester Little cigars, 50 percent of Nabisco Brands Espania, the Dromedary Food operations, Prince Albert and Carter Hall (a total of 4 tobacco plants) and Nabisco Brands Ltd. of Canada. Beatrice's divestitures included BCI Arrowhead Drinking Water Co., its 50 percent stake of Comabra to its local partners in Brazil, and in August the TLC Group limited partnership of New York paid $985 million for Beatrice International Food Companies, some 64 companies in 31 countries in all. Beatrice Foods of Canada Ltd. was sold by the TLC Group for $225 million to Onex Corporation of Toronto.

Foreign activity

Not to be overlooked is the 70 transactions which took place under the heading "Foreign Firms Buying U.S. Firms." Foreign companies realize the strength that can be added to their operations by acquiring well-known U.S. brand names. With the weakened U.S. dollar, foreign-based acquisitions made a lot of economic sense in 1987. And 1988 shouldn't be any different.

New products

Research and development activity and the introduction of new products have long been barometers of industry strength. If measured by that ruler, 1987 was an extremely good year. Marketing Intelligence Service (MIS) of Naples, NY posted 3,584 new food and beverage products introductions last year alone. The stock market readjustment of last October and the predicted slow economy of 1988 seems to have little effect on these activities.

Jim Blair, general counsel at Tyson Foods, feels that even though Black Monday adversely affected them, it will not affect the company's R&D efforts. "We are so committed to further processed products and we realize we have to have new products in the pipeline. That has become our reason for existence and we are not about to cut back on it." New product development will continue, he says, because "Once you get in our market position, you can't rest on your laurels, you have to hold onto your position."

Richard Knowlton of George A. Hormel concurs. "We are moving forward very aggressively," he says, "We don't have any thought of changing our direction. 1988 will see an increase in R&D and an increase in advertising budget expenditures."

Mergers/acquisitions 1984-1987

	1984	1985	1986	1987
Total Activity	583	658	724	599
By Industry Segment:				
Food Processors	89	95	114	109
Diversified Firms with Food Interests	48	39	57	37
Meat Packers	8	5	10	8
Poultry Processors	11	12	8	10
Soft Drink Bottlers	14	14	19	21
Dairy Processors	13	21	9	19
Foreign Firms Buying U.S. Firms	40	55	59	70

Source: The Food Institute

Variety & convenience

"A lot of what is driving new foods and beverages today is convenience and variety," says Richard Lawrence, president of MIS.

Microwave-specific or microwave-compatible foods respond to the need for convenience. It is projected that by 1990, 85 to 90 percent of all homes will have a microwave. Today, 50 percent of all workplaces make microwave ovens accessible. At home, the number of children who are becoming used to fixing their own snacks and meals in the microwave continues to grow, as does the number of men who are using the microwave. All of this creates a huge market for new microwaveable foods.

Convenient, and also growing in variety, are the increasing numbers of refrigerated foods available at the supermarket. Lawrence from MIS sees great consumer enthusiasm in this area. "There is no question that the consumer tends to equate freshness with quality and good taste and being better for you. Refrigerated products rank high on the scale of things which are indeed fresh."

Refrigerated, however, is still in the infancy stage. With the rapid growth in products and packaging being developed for this category comes some problems that will have to be addressed, not the least of which are some concerns about the microbiological safety of these products. Also, says Sue T. Borra, R.D., manager of consumer information with the Food Marketing Institute in Washington, D.C., "Refrigerated puts a new product in the hands of consum-

ers and they have to learn to use it. There are a lot of concerns in this area that must be met, such as safety in packaging, education of the consumer, and quality control."

Nutrition awareness

The consumer has become far more educated in the past decade or so and appears to be paying more attention to what he eats. Jim Heimbach of the FDA Consumer Service in Washington, DC says that "80 percent of the consuming public is aware" of the links between diet and disease. And, more and more, it is affecting what is consumed. Today consumers seem to be checking labels and planning meals based on risk avoidance—avoiding the problems of high sodium content, or high cholesterol content.

In Food Marketing Institute's "1987 Trends" survey, 98 percent of 1,007 people studied indicated that consumers were most concerned with salt content, vitamin/mineral content and sugar content of products.

A trend that has not declined despite the sluggish economy is the public's willingness to pay for quality. "Quality is still number one," says Sue Borra, "Taste, nutrition, food safety—all come ahead of price and economy."

Challenges & opportunities

The major challenge that lies ahead for the food processor in 1988 is the ability to meet head-on the economic challenges of a slow economy and a predicted future recession.

Another challenge is to better adapt products and packaging to America's changing demographics. There are more and more households (estimated at more than half) that are headed by single persons, single parents or two working parents. It is important to meet their needs with different portion sizes, added convenience and better containers that will permit a product to go from the freezer, into the microwave, then directly to the table.

Food products expenditures 1983 - 1987

Year	($millions)	% Increase
1983	$421,888	base
1984	448,453	6.2
1985	472,799	5.4
1986	497,802	5.3
1987	515,776	3.6

Source: Bureau of Economic Analysis, Department of Commerce

Gross national product 1983 - 1987

Year	($millions)	% Increase
1983	$3,405,700	base
1984	3,772,200	10.7
1985	4,010,300	6.3
1986	4,235,000	5.6
1987	4,487,700	6.0

Source: Bureau of Economic Analysis, Department of Commerce

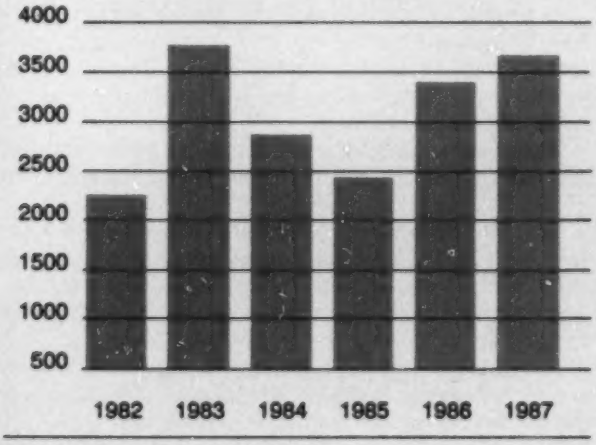
"We have only begun to identify the many ways in which we think food will be consumed," says Knowlton of Hormel. "There are many prospects there for bringing flavorful convenience foods to consumers. This is an on-going exercise. You have to be flavorful first, and then have a strong commitment to being nutritional as well."

Lawrence at MIS sees a chance for processors to expand their profitability by looking at some other channels of distribution. "For example," he says, "in the refrigerated food business you would want to be in 7-Eleven stores, convenience stores where people are stopping to and from work to pick up that kind of thing to either eat it on the run, or take it home. You must take the food where the people are."

A significant opportunity, says Sue Borra, is for processors to increase their line of foodservice-type foods that will fit into the supermarket. "There is great expectations for growth in this area by 1990," she says. This will be a joint effort between the processor and the retailer to develop quality hot and cold foods "to go."

And there are exports. It is an opportunity that Tyson Foods has already taken advantage of. The company has been able to use overseas sales to combat some of the effects of a sluggish U.S. economy. "Our Japanese business is growing at a marvelous rate, starting, of course, from a low base. I think we will try to broaden the scope and enter other markets," says General Counsel Jim Blair.

New Product Introductions



Source: Marketing Intelligence Service

Read on

In the following pages, *Food Engineering* will examine each segment of the food industry and analyze what happened in 1987, but also forecast what lies ahead.

There are challenges ahead, to be sure, but the U.S. food industry has proven itself able to accept and meet past challenges. The true test will be in being able to maintain its record of strength, profitability and innovation through a possible recessionary economy.

STATE OF THE FOOD INDUSTRY

SNACK FOODS

Snack food continued its steady grow in 1987. Manufacturers sales of nuts were an estimated $1.6 billion in 1987, up 6 percent over 1986. Salted snacks were up 9 percent over 1986 to an estimated $4.9 billion in 1987, according to Business Trend Analysts, Commack, NY.

Nominal dollar growth for the industry has been solid over the past ten years for salted snacks, with a yearly growth rate between 5.6 and 15.3 percent in a market that has more than doubled since 1977.

The country's most popular snacks continue to be potato chips made from potato slices and the fabricated variety made from dried potatoes. These snacks account for almost half of the industry's sales. In second place are corn chips, including tortilla flavored chips, with about 20 percent of market share. Salted nuts have 14 percent of the market, followed by extruded snacks, meat snacks, and pretzels which each have about 5 percent.

The manufacturers sales of salted snacks are expected to more than double to $11 billion by 1996, with an annual growth of 3.5 percent.

The realm of snack foods available has widened due to changing demands from consumers. Buyers are demanding more gourmet items, and at the same time they are demanding more healthy items. The population is getting older, and less people are eating the traditional three meals a day at home.

The overall composition of U.S. population has become bigger in the middle and older aged segments. Consumer preferences are increasing for products high in quality and nutrition, perhaps a result of the health and fitness craze. The emergence of more working women and mothers has led to an on-the-go, fast-paced lifestyle which calls for more convenience foods, including snacking foods.

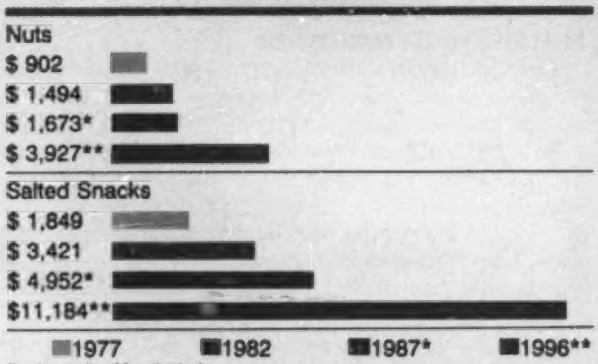
Even fast food restaurants are affecting the snack food market. Drive-in windows make snacking convenient. So products such as McDonald's Chicken McNuggets have become popular snacking items.

Gourmet, or up-scale products, have achieved a lot of popularity, despite their higher price tag. Since the population is getter older, many of these consumers have more disposable income and are willing to pay the price for higher quality gourmet items.

In addition to a bigger choice of snack foods, consumers are currently experiencing a wider array of snack food flavors and tastes. Mexican style remains popular, with jalapeno and salsa seasoning cropping up more and more in certain snack foods. Snack food manufacturers have acted on the consumer desire for spicy flavored snack food items by extending product lines that employ spices not normally used in snacks.

At the Snack Food Association show, Snaxpo, held in Dallas in March, the spicy and exotic trend is continuing. Many observers think that Mexican is clearly here to stay, not a passing fancy. On the other hand, Cajun, though popular recently, is not here to stay, according to many industry followers. The new snack flavors on the horizon, as seen at Snaxpo, will be Caribbean and new and exotic oriental flavorings, especially Thai. Another possibility is tomato flavor, which is now very popular in Canada as a potato chip flavoring.

Snack foods sales
(In millions of dollars)



*estimated **projected
Source: U.S. Department of Commerce; Business Trend Analysts, Commack, NY.

In the healthy snack food market, the only winner is the fruitbars segment which has exploded recently (for example, *Fruit Wrinkles* from General Foods, and Thomas Lipton's *Fruit Nibbles*). While this segment is growing, the traditional healthy snack, the granola segment, is showing no signs of growth.

According to Find SVP, New York, NY, healthy snacks are those perceived by the consumer as healthy. They include granola bars, dehydrated snacking fruits, fruit rolls/bars/bits, plain pre-popped and microwaveable popcorn and bulk snacks and trail mix.

The challenge facing healthy snack marketers is how to mainstream their products to appeal to more than those people who shopped in the health food stores of the '60s and '70s.

As proven by the failure of the granola bar, enrobing healthy products in chocolate or other candy-like ingredients was not successful, Find/SVP says. The future for healthy snacks, granola bars and fruits roll types snacks is not particularly optimistic.

On the other hand, all types of popcorn are expected to grow to $788 million dollars in 1991 from $318 million in 1986.

Nuts have always been perceived as one of the more nutritious snack foods available since they often contain calcium, phosphorus, iron, potassium and various vitamins. The majority of nuts are low in saturated fats and contain no cholesterol. This segment of the snack food market has grown tremendously from under $400 million in 1970 and is expected to grow to close to $4 billion by 1996. This prediction depends greatly on large harvests, says BTA.

All in all, the healthy snack food market is expected to increase by about 4 percent yearly.

STATE OF THE FOOD INDUSTRY

DAIRY PRODUCTS

While the overall dairy category saw only modest growth in 1987, several products within this category faired much better. Adjusted for inflation, dairy shipments rose only 0.6 percent in 1987, according to the U.S. Industrial Outlook, 1988. Frozen yogurt, butter, and ice cream were among the big winners in 1987.

The dairy category is divided into five categories by the U.S. Department of Commerce: Fluid milk, butter, natural/processed cheese, condensed/evaporated milk, and ice cream/frozen desserts.

Fluid milk: The increasing popularity of 1 percent lowfat milk was a key factor in the 5 percent gain of per capita use of lowfat milk in 1987. On the other hand, per capita consumption of fluid whole milk dropped from 121.57 pounds per person in 1986 to 118.57 in 1987.

In an effort to address the problem of surplus milk, the government bought 1.6 million cattle from dairy farmers for $1.83 billion from April 1986 to September 1987. This did result in decreased milk production temporarily. But with the lure of all surplus output of milk being bought at support level by the government, dairy herds are being expanded. For example, The Texas Agricultural Experiment Station reports that Texas is now producing more milk per herd than ever.

Butter: The first rise in per capita butter consumption in several years was seen in 1987. The U.S. Industrial Outlook 1988 reports a 4.7 pound per capita consumption of butter in 1987—a 2.1 percent increase over the previous year. The Outlook credits several factors for the increase: Stable prices, renewed consumer preference for richer foods, and increased advertising.

Natural/processed cheese: Cheese consumption is expected to increase to 26.04 pounds per capita in 1991, predicts the United Dairy Industry Association (UDIA). This would be a 4.8 percent increase over the 24.84 pounds per capita consumption in 1987.

The UDIA also pointed out that per capita consumption of mozzarella has soared more than 70 percent over the last five years, and is projected to continue its upward climb. "The Italian cheese category benefited tremendously from the growth of pizza sales both in the foodservice and grocery segments; interest in cooking and eating out also led to wider experimentation with ethnic cheese varieties," says Gerald Quackenbush, UDIA market research consultant.

Still, the top choice among sliced cheeses is American, comprising a 72.3 percent of the sliced cheese market, according to Stamford, CT-based MRCA Information Services. It was also pointed out that parmesan topped the grated cheese market, with a 66.2 percent share.

Other findings in a new study by MRCA, *Cheese: A Marketer's Guide to Consumer Purchasing*, include:

- Average price per pound of cheese remained stable at $2.36 from 1985/86 to 1986/87.
- Low fat/low calorie cheese posted a dramatic increase, up 22 percent in volume purchased between 1986/87 and the previous year.
- Imitation cheese declined 16 percent in volume in 1986/87 from the previous year.

Per capita consumption of select dairy products 1987 (lbs.)

Creamed Cottage Cheese	2.81
Lowfat Cottage Cheese	1.07
Yogurt	4.25
Skim Milk	12.30
Lowfat Milk	89.00
Fluid Whole Milk	118.57

Source: U.S. Department of Commerce

Condensed/evaporated milk: Valued at $3 billion, estimated commercial sales of canned/dry milk accounted for 51.2 percent of 1987 products shipments, down from 70.1 percent in 1982, according to the U.S. Industrial Outlook 1988.

Ice cream/frozen desserts: The biggest growth in this area was experienced by frozen yogurt. "In 1987, frozen yogurt woke up everybody—I'm expecting to see more introductions in this category," Howard Waxman, editor of Find/SVP's *The Ice Cream Reporter*, told *Food Engineering*. Growth of frozen yogurt began with expansion of soft serve products, with hard frozen yogurts now becoming more prevalent.

Preliminary USDA figures for overall ice cream production for 1987 showed a 0.7 percent increase, compared to 2.5 percent increase for 1985 to 1986. The market was inundated with new super-premium ice cream products in 1987, yet growth in that area is slowing down, reports Waxman. Earlier predictions for super-premium ice cream called for continued double digit growth in 1987, yet the larger growth came in the more "healthy" frozen yogurt category. The leaders in super-premium category such as Häagen Dazs and Ben & Jerry's continue to do well, though.

Häagen Dazs' Macadamia Brittle was selected by *USA Today* as the Best New Ice Cream in 1987. Macadamia Brittle, along with Chocolate chocolate mint and Mocha double nut make up the Special Additions line. The company recently announced the introduction of Häagen Dazs Bar with milk chocolate and roasted almonds coating.

The first aspartame-sweetened frozen novelties were introduced in 1987, with more expected in 1988. But the overall category of miscellaneous combinations of fudge bars, pudding pops, and frozen yogurt mixes saw a 21.6 percent plunge in 1987, according to U.S. Industrial Outlook.

"There always will be a demand for something new in the ice cream industry—people have come to expect it," concluded Waxman.

STATE OF THE FOOD INDUSTRY

BAKERY PRODUCTS

The bakery products industry had a relatively good year in 1987. The cookie segment of the industry showed the greatest increase in per capita consumption where 10.90 lbs. were consumed in 1987 as compared to 10.64 lbs. in 1986. White bread consumption had a very slight decrease—45.22 lbs. in 1987 compared to 45.26 lbs. in 1986 (U.S. Industrial Outlook). Real shipments of baked goods remained the same as 1986, although the Outlook reports that constant dollar shipments of bread and cakes slipped 0.3 percent but the shipments of cookies and crackers rose 0.9 percent.

The sales of bakery products reached $22.5 billion in 1987, reports Business Trend Analysts, Commack, NY. Bread and bread-type products command the market for baked goods, accounting for 40.9 percent of sales. Cookie and cracker sales captured more than one-third of total bakery product revenues for 1987. Cake and cake-type items accounted for 16.3 percent while frozen baked goods accounted for 8.2 percent of sales.

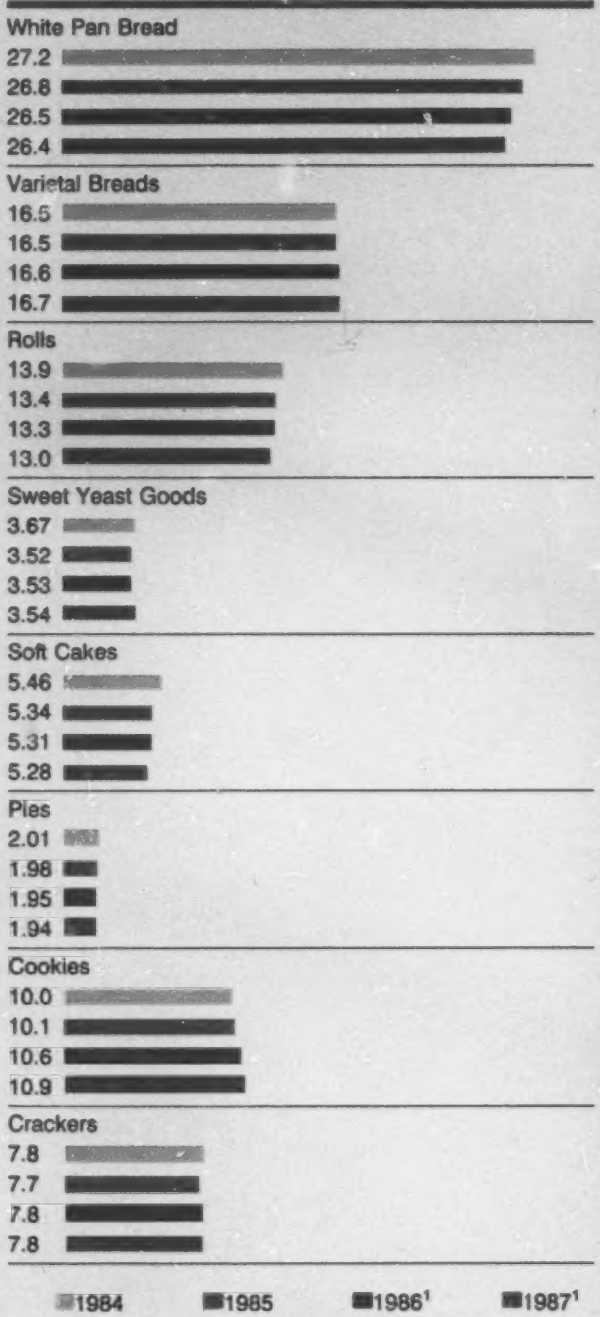
A new wave in the bakery products industry—in-store bakeries—has meant severe competition to manufacturers' sales figures. The number of in-store bakeries has more than doubled since 1980, reaching an estimated 20,203 in 1987, reports Business Trend Analysts. Estimated sales of such bakeries topped $5 billion in 1987, compared to $2.1 billion in 1980. The real trouble for bakery product manufacturers is that often retailers with an in-store bakery take much of the shelf space formerly given to the producer in order to emphasize products sold through the in-store unit. Bakery product manufacturers have also seen competition from bakery mixes and refrigerated bakery product doughs.

Going along with the consumer interest in health and fitness, the bakery companies have seized the opportunity and introduced products that are perceived by consumers to be more nutritious than white breads. Variety breads such as wheat, sourdough and pumpernickel are claimed to be high in fiber, vitamins and minerals, and have attracted much consumer attention in the past several years.

In addition to variety breads, manufacturers have also used the reduced-calorie eating trends to introduce "light" bread varieties. These breads usually have 40 calories per slice and a number of new products were introduced within the last year: Arnold Foods' "*Arnold Bakery Light Bread*"; Dillons' "*Olympic Meal Light Bread*"; and Orts' "*Liter 35*" bread line, to name a few.

The cookie segment of the bakery industry has also seen a shift toward marketing new products that convey a healthy image to the adult consumer. These products are made with no preservatives and contain natural ingredients such as fruit, nuts, granola, and whole grains. One example is the *Americana Collection* from Pepperidge Farm which is a line featuring bits and chunks of fruit and nuts, in eight-cookie, single-serving packages, according to Packaged Facts, The Information/Research Company, New York, NY.

Per capita consumption of bread and related products
(in pounds)



[1]Estimated by the International Trade Administration.

Source: U.S. Department of Commerce, U.S. Industrial Outlook, 1988.

STATE OF THE FOOD INDUSTRY

CANNED FOODS

Although per capita consumption of canned vegetables edged-up in 1987, consumption of both canned fruits and vegetables continues to decline long-term in favor of fresh and frozen. According to the Department of Commerce (DOC), the only "canned" sectors sustaining growth are ethnic foods, sauces/dressings, soups and aseptic juices. As a percentage of total fruit/vegetable consumption, per-capita consumption of canned fruits and vegetables slid from 35 percent in 1972 to 28 percent in 1986 while fresh produce increased market share from 52 to 55 percent and frozen from 13 to 17 percent over the same period.

Although the value of shipments in the canned sector rose 4.6 percent in 1987 to $23.4 billion, DOC reports, constant dollar shipments rose only 0.6 percent.

When it comes to canned vegetables, there seems to be something of a dichotomy in consumer perceptions: Canned vegetables are more convenient than fresh vegetables but less nutritious than either fresh or frozen vegetables. "The outlook for use of both canned and freezing vegetables depends upon consumers' continued desire for convenience and their perception of the nutritional value of processed vegetables," said USDA Economist Shannon Reid Hamm at USDA's Outlook '88 conference last December in Washington, D.C. "However, the trend in processing use has favored freezing over canning, except for tomatoes."

Per-capita consumption of canned vegetables edged-up in 1986 to 82.1 lbs. from 81.4 lbs. in '85 while per-capita consumption of frozen vegetables slipped a bit to 17.2 lbs. from 17.6 lbs. a year earlier. But this seems to be a seasonal aberration; the long-term trend is down. Since 1980, according to USDA, per capita consumption of fresh vegetables jumped 9.5 lbs.—from 80.7 lbs. in 1980 to 90.2 lbs. in 1986—while per capita consumption of frozen vegetables surged from 15.7 lbs. to 17.2 lbs. and canned vegetables slid from 84.6 to 82.1 lbs. over the same period.

Per-capita consumption of fruits continues to trend-up along with nutrition concerns but—as with vegetables—it's the fresh and frozen segments that have gained as the canned segment continues to decline. According to USDA, per-capita consumption of fresh fruit grew steadily over the past five years from 209.1 lbs. in 1983 to an estimated 216.2 lbs. in 1987. Per-capita consumption of frozen fruits peaked at 84.7 lbs. in 1985, then fell-back to 83.2 lbs. last year. The trend for canned fruits, however, has been steadily down—from 19 lbs. per capita in 1983 to 16 lbs. per capita in 1987. Outlook for processed fruits: "Per-capita consumption of canned, frozen, chilled and dried fruit is expected to remain relatively steady," said USDA Economist Ben W. Huang, at Outlook '88. For non-citrus fruits the outlook is mixed, Huang continued. Bigger crops of apples, Clingstone peaches, Bartlett pears and cherries should result in more canning of these fruits than in '87.

According to DOC, shipments of prepared soups have grown at an annual rate of about 5 percent after plateauing in the early '80s. Dry soups and microwaveable ready-to-serve soups lead the trend. Aseptic juices haven't peaked yet and will grow "by at least 6 percent in 1987," said DOC.

Overall outlook: "Canned" food shipments will grow by about 1.1 percent in 1988, according to DOC, but the growth will be in sauces/dressings, ethnic foods and aseptic juices.

Aluminum cans still account for only about 5 percent of canned foods (as compared to 95 percent of canned beverages) but new aluminum can-making technology may put at least a dent in steel's dominance of the can market.

Trends & forecasts: canned foods[1]

($ million except as noted)

INDUSTRY DATA	1984	1985	1986[2]	1987[3]	1988[4]	percent change 85-86	86-87	87-88
Value of shipments	21,756	22,712	22,401	23,421	-	-1.4	4.6	-
Value of shipments (1982$)	20,157	20,864	20,419	20,543	20,777	-2.0	0.6	1.1
Total employment (000)	128	128	130	132	133	1.6	1.5	0.8
TRADE DATA								
Value of imports	1,708	2,062	1,831	1,847	-	-11.2	0.9	-
Value of exports	558	533	593	667	-	11.3	12.5	-

[1]SIC 2032, 2033, 2034, 2035 [2]Estimate except imports and exports [3]Estimate [4]Forecast

Source: U.S. Department of Commerce

STATE OF THE FOOD INDUSTRY

BREAKFAST CEREALS

The breakfast cereal industry had another good year in 1987. Sales for cold-ready-to-eat cereals were over $5.3 billion for the year, an increase from 1986 sales of $4.9 billion, reports John C. Maxwell, Jr. of Wheat First Securities, Richmond, VA. Part of the increase in sales most likely came from a three percent price increase that was put into effect in the first quarter of the year.

Production costs stabilized which helped moderate increases in producer and consumer cereal prices during the year, according to the U.S. Industrial Outlook, published by the Department of Commerce. Per capita consumption for cereal rose again in 1987, up slightly from 1986—from 14.8 lbs. to 15.2 lbs.—an increase of approximately three percent. Specifically, ready-to-eat cereal consumption increased from 11.3 lbs. to 11.6 lbs.

The cereal industry, it must be noted, is highly concentrated among five chief competitors which hold an estimated 82.7 percent of the market. The order: Kellogg is the leader at 35.9 percent, General Mills, 19.8 percent, General Foods, 12.6 percent, and Ralston Purina and Quaker Oats tied at 7.2 percent (U.S. Industrial Outlook). On a specific note, Maxwell reports that Kellogg gained a few shares in the market in 1987 while at the same time, General Mills lost some shares.

Fiber still seems to be playing an important part in the composition of cereal foods again this year. The popularity of fiber and the marketing wars among the major cereal producers are very much evident in the industry this year as in the past two years. SAMI/Burke, Inc. (New York, NY), reports an increase of 8.9 percent in retail sales of all cereals this year. In particular, cereals containing fiber/bran rose 6.1 percent this year, with sales at $795 million compared to 1986 figures of $749 million.

U.S. Industrial Outlook reports consumers between the ages of 25 and 49 show a preference for bran, fiber, high-nutrition and multi-grain cereals. In 1987, Kellogg spent $33 million to promote an adult cereal, *Mueslix*, fashioned on the Swiss cereal, *muesli*, which is a combination of barley, corn, oats, rice, and wheat.

It is interesting to watch the trend of hot cereal consumption by the American public. It has been steadily rising over the past seven years and 1987 was no exception. Per capita consumption was up from the previous year to 3.60 lbs. as opposed to 3.53 lbs.

The market for hot cereals, though, has always been chiefly limited to young children and older adults. This year, the marketing for hot cereals changed, however. New flavors, convenience, and ease of preparation—especially in microwaves—have all swung the marketing direction of hot cereals to more adults.

Quaker Oats, long the leader in the hot cereal industry with 68 percent of sales, began a massive advertising campaign in 1987 to defend its share of the market. The company wanted to promote its oatmeal line to the average adult but also found itself fighting off a new contender in this market—General Mills. It is estimated that Quaker Oats will spend $45.6 million to defend its frontrunner status in the $500 million hot cereal market before the year is out.

Besides large media efforts, Quaker Oats is also promoting its hot cereal line several other ways: putting samples of instant oatmeal inside boxes of cold cereal, coupons, and game cards.

The challenger to Quaker Oats, General Mills, entered the hot cereal market with its new *Total Oatmeal*. U.S. Industrial Outlook reports General Mills supported it product with a $24 million advertising budget.

An interesting anecdote on how competitive this industry really is: the above-mentioned rivalry between Quaker Oats and General Mills was not only just for market share. When General Mills announced its new line, Quaker Oats filed a suit alleging a trademark violation by the other company. When the court decision was made in the form of a consent decree, General Mills agreed to stop using part of Quaker Oat's logo.

Per capita consumption of breakfast cereals (estimated in pounds per person)

Category	1982	1983	1984	1985	1986	1987
Total[1]	12.59	12.95	13.59	14.48	14.87	15.27
Ready to Eat	9.41	9.71	10.20	11.02	11.34	11.67
Corn	3.04	3.10	3.25	3.36	3.46	3.57
Wheat	3.10	3.17	3.31	3.42	3.51	3.61
Rice	1.19	1.21	1.27	1.31	1.34	1.37
All other except Baby cereal	2.08	2.23	2.37	2.93	3.03	3.12
Hot cereal	3.18	3.24	3.39	3.46	3.53	3.60

[1]Totals based on production and exports but not imports.

Source: U.S. Department of Commerce, Bureau of the Census and International Trade Administration (ITA).

Product shipments of cereal breakfast foods (in millions of dollars)

Industry	1982	1983	1984	1985	1986[1]	1987[1]
Total	3,111	3,398	3,870	4,379	4,821	5,342
Ready-to-serve	2,775	3,032	3,452	3,906	4,316	4,787
Hot Cereals	330	360	410	464	496	545
Unspecified items	5.5	6.0	6.9	7.8	8.5	9.4

[1]Estimated by International Trade Administration (ITA).

Source: U.S. Department of Commerce, Bureau of the Census and International Trade Administration (ITA).

STATE OF THE FOOD INDUSTRY

MEAT & POULTRY

As predicted last year by USDA, 1987 per-capita consumption of poultry surpassed that of beef for the first time in history and the trend will accelerate. The adverse impact of last year's *60 Minutes* "exposé" of Salmonella on poultry was short-lived: Per-capita consumption of poultry (chicken plus turkey) totaled 77.7 lbs., surpassing beef by 2.5 lbs., and USDA projects per-capita poultry consumption soaring beyond beef by an astonishing 10.9 lbs. this year. Major reason: Consumer concerns about diet and health. Price and convenience are factors, too: Poultry is not only less expensive than beef but is used in a wider variety of frozen entrees and other convenience foods.

According to the Department of Commerce, overall value of meat shipments rose 4.3 percent in 1987 to $69.7 billion but adjusted for inflation declined 1.2 percent. Red-meat shipments fell more than 2 percent to $56.7 billion ($42.5 billion fresh meat, $14.2 billion sausage and prepared meats), while the value of poultry shipments rose 5.3 percent (5.8 percent in constant dollars) to $13 billion. Red-meat production fell 2.2 percent to 38.2 billion lbs. as poultry production soared 9.8 percent to a record 20 billion lbs. Red meat accounted for about 81 percent of the value of all meat industry shipments, down 4 percent since 1982.

Feed prices declined but beef and pork producers tightened supplies to keep prices up. During the first six months of '87, consumer prices for beef and pork rose 6.8 percent and 14.1 percent respectively, and consumer prices for poultry rose 9 percent due to strong demand. But "it appears that the long-awaited buildup of the nation's cattle herd has begun," said American Meat Institute Chairman Kenneth W. Montfort, now president of ConAgra's red meat division since ConAgra's purchase of Montfort of Colorado earlier last year, at the AMI convention last October in Chicago. "Likewise, pork producers are expanding their production. We believe beef and pork will continue to be mainstays of the nation's diet."

Convenience trends in poultry include new products such as: "Perdue Done It!" fully-cooked microwaveable chicken parts in a controlled-atmosphere package (CAP); Tyson marinated chicken-breast filets; and ConAgra Mexican-style boneless seasoned chicken strips.

Red-meat packers may have been slower to develop convenience products but are on the move with innovations such as vacuum-packaged, closely-trimmed branded fresh beef with extended refrigerated shelf life (EXCEL); CAP-packaged branded fresh pork cuts (Wilson and Thorn Apple Valley); CAP-packaged fresh lamb (Rocco) and frozen veal (Provimi); shelf-stable entrees in retortable plastic (Top Shelf from Hormel); fully-cooked, microwaveable frozen pork chops, pork-sausage patties and egg/bacon biscuits (New Tradition, from Hormel). Vac-pack and CAP technologies are accelerating the trend toward centralized retail meat cutting at the packer level for greater economies of scale than can be achieved by retailers. Prepacked retail cuts further offer better yields for the retailer, less re-work at store level and allow the retail meat cutter "to become more of a salesman," observed William Fielding, president of EXCEL. Retailers and consumers are accepting vacuum-packaged fresh-beef cuts, Fielding added, "but we need to convince the retailer to take a lower gross margin—10 percent rather than 20, for example."

Meat & poultry per capita consumption (lbs.)

	Beef	Pork	Chicken	Turkey	Veal	Lamb	Total
1985	78.8	62.0	57.6	12.1	1.8	1.4	213.7
1986	78.4	58.6	58.8	13.3	1.9	1.4	212.4
1987	75.5	58.9	62.5	15.2	1.5	1.3	214.9
1988[1]	71.8	62.6	65.3	17.4	1.5	1.3	219.9

[1]Estimate
Source: USDA (February 1988)

The beef industry is cutting the fat out, noted outgoing AMI Chairman Richard L. Knowlton, president and CEO of Hormel. AMI and the National Cattlemen's Association jointly petitioned USDA last year to uncouple yield and grading, Knowlton reported. This would enable packers to trim carcasses on the slaughter floor, meeting consumer demand for well-trimmed beef while cutting energy costs for packers. More trim by packers, combined with the quarter-inch trim program adopted by most retailers and the recent grading change of USDA Good to USDA Select "will enhance the image of leaner beef," added Montfort.

Producers have already taken a year off the slaughter age of cattle and have developed bigger cattle with less fat, Montfort continued. "Through herd selection today and genetic engineering tomorrow, we're converting more feed to meat and less to fat," said Montfort.

Mergers, acquisitions and divestitures are reshaping the meat industry, as elsewhere. 1987 highlights: Occidental Petroleum sold 49 percent of IBP—now the nation's largest pork packer as well as the largest beef packer—through a public offering; ConAgra acquired Montfort, E.A. Miller & Sons and 50 percent of Swift Independent Corp., boosting ConAgra from tenth to third largest meat company in the U.S. But new faces are emerging, too, Knowlton noted. "Today there are specialists in every sector, particularly fresh meat," he observed. "Others are directing themselves toward the sausage business, still others toward smoked and processed meats...dry sausage...deli and pre-packaged luncheon meats. Specialists are finding success catering to the many niches within the market."

Measured in constant dollars, red meat production will rise about 1.7 percent in 1988, says USDA, with beef falling 4 percent but pork production rising about 10 percent. Per-capita pork consumption will rise nearly 5 lbs. this year due to larger supplies and lower prices. Poultry production will surge 5.1 percent and per-capita poultry consumption will increase from 36 percent of total meat consumption in 1987 to 40 percent by 1992.

STATE OF THE FOOD INDUSTRY

CONFECTIONS & DESSERTS

People are trading truffles (especially oversized ones) for turtles and fudge, says Joan Steuer, president of New York-based Chocolate Marketing. While the overall confectionery category is healthy, sales of super-premium chocolates (those over $20/lb.) are declining. This is partly due to the increased availability of regional chocolates at a lower cost, explains Steuer.

Despite health concerns, the candy market is expected to continue its upward climb. Packaged Facts in its report, *The Candy Market*, predicts the overall confectionery market should grow at an average annual rate of 1.9 percent, reaching 5 billion pounds by 1995. Nonchocolate candy volume should grow faster than chocolate volume, the report continues to point out.

Concerning negative attitudes towards sugar, The Candy Market report says, "Robust candy sales, the sweetest of all snacks, over recent years certainly calls into question any casual relationship between consumer attitudes and actions with regard to the sweet white substance (sugar)." And according to Market Research Corporation of America (MRCA), even those who identify themselves as dieters are allowing themselves 46 percent more chocolate bars as in the early 1980s.

A recent study by M&M/Mars (a company which along with Hershey holds 36 to 38 percent of the candy market) pointed out that confectionery in the U.S. is generally perceived as a taste treat rather than used to relieve hunger. They are being positioned more as a permissible snack food for inclusion in a regular diet.

The National Confectioners Association, along with several other confectionery associations, has distributed a pamphlet on how candy can fit into a fitness program. The pamphlet shows how to estimate one's daily caloric requirements, and how some of these calories can come from confectioneries. Charts showing the number of calories in a variety of confectionery products and how many calories are consumed by various activities are provided.

A number of trends within the confectionery market were noted by Chocolate Marketing's Seuer. "We're seeing more larger size chocolate bars both because of a commodity surplus of cocoa and because people are finding dual uses for chocolate bars," says Seuer. "Consumers are using chocolate bars to bake with more and more, rather than just eating them plain since, like with wine, some consumers have decided that if it isn't good enough to eat or drink then it isn't good enough to cook with."

Chocolate candy consumption is slightly ahead of nonchocolate consumption. The U.S. Department of Commerce reports total chocolate candy consumption for 1987 at 2.4 billion pounds or a 4.3 percent increase over the previous year, while nonchocolate consumption for the same period is 2.1 billion pounds or a 5 percent increase.

Elegant desserts haven't completely disappeared, though. Truffle Kits are becoming more prevalent, as is European positioning of desserts in general. A particularly novel new dessert was recently introduced by Gourmet International Foods, Inc. *Mousse Eclat* is an aerosol mousse which comes in an 8 ounce can and retails for $7.00.

Projected manufacturers' candy pound volume: 1986-1995
(in billions)

Year	Total*	% change	Chocolate	% change	Non-chocolate	% change
1995	5.03	2.2	2.62	2.0	2.17	2.5
1994	4.92	2.1	2.57	2.0	2.12	2.5
1993	4.82	2.3	2.52	2.0	2.07	2.5
1992	4.71	1.7	2.47	2.0	2.02	2.0
1991	4.63	1.0	2.43	1.5	1.98	2.0
1990	4.55	2.0	2.39	1.5	1.94	2.0
1989	4.46	2.0	2.35	1.5	1.90	1.5
1988	4.41	1.4	2.32	1.0	1.88	1.5
1987	4.35	1.4	2.29	1.0	1.85	1.5
1986	4.29	-	2.27	-	1.82	-
Average annual rate		1.9		1.6		2.0

*Total includes average of 5% for candy sales not specified by kind.
Source: Packaged Facts.

A major factor in determining the future health of the candy and dessert market will be estimating the price and availability of sugar. "Fortunately, the 1980s have been a period of relative calm in the world sugar market, particularly in comparison with the turbulence of the late 1970s. At present, sugar prices are relatively stable and seem likely to stay that way for the foreseeable future," states Packaged Facts' candy report.

Chocolate products are also dependent on cocoa supply. "With only a handful of countries supplying the cocoa needs for the entire world, extreme weather conditions or political unrest in any one of the key producing nations can affect the world market," states Packaged Facts' candy report. The report continues to point out that even nonchocolate candy sales are affected by the cocoa market, since dramatic shifts in chocolate candy prices could have a reverse effect on the price of nonchocolate candies.

Other uncertainties in the confectionery market could be caused by the fact that the U.S. Industrial Outlook 1988 predicts two or more candy manufacturers will merge or be acquired by foreign firms during 1988.

Some opportunities for candy manufacturers still remain. These will be in the areas of "natural" products, individually wrapped items, and sweet/salt combinations, says Seuer. Individually wrapped items offer convenience and a quick pick-me-up, and they have fewer calories than a larger item.

STATE OF THE FOOD INDUSTRY

DRESSINGS & SAUCES

Being calorie conscious and consuming sauces and gravies – particularly those of the ethnic variety in great quantities – are two trends the American public appears to be following unabated. The first trend is quite evident in the dressing segment of the food industry where sales of low calorie/reduced calorie salad dressings have risen significantly while sales of higher-calorie dressings and condiments fell over the past several years. The second trend is evident in the sauce market, where steadily rising sales are seen, particularly in the ethnic types like Italian, Cajun and Creole.

The sauce and gravy market often reflects trends in American eating habits and with the many new product introductions, FIND/SVP (New York, NY) reports this market reached profits of $2.9 billion in revenue in 1987. New product introductions in 1987 numbered approximately 200, according to FIND/SVP. This number is up significantly from 1985 when 128 new sauces and gravies were introduced to the market. Italian sauces held the largest share of this market in 1987, followed by meat and poultry sauces (including barbecue, steak and other meat sauces), dry sauce and gravy mixes, and Mexican sauces. The remaining categories in this market are liquid gravy, soy sauces, and hot sauces.

Sales figures indicating the trend the consumer is following in reducing calorie consumption can be seen in the decreased sales of old-standby condiments such as mayonnaise and ketchup. Mayonnaise sales, according to Selling Areas-Marketing/Burke Inc. (SAMI), New York, NY, have decreased to $630 million for 1987, compared to $658 million for 1986, a change of -3.7%. Ketchup sales decreased also, $500 million in 1987 as compared to $515 million in 1986, a change of -2.6%.

Other condiments, however, are showing good areas of growth, namely mustard and barbecue sauces. These items are probably showing increased sales because of their lower calorie content as compared with a condiment such as mayonnaise. For example, prepared mustard showed a slight increase of 1.1% ($186 million in sales) from 1986 sales ($184 million in sales). SAMI also reports a retail sales volume for barbecue sauce at $320 million for 1987, up 2.2% from 1986. The barbecue sauce market is somewhat dominated by one leading company, Kraft, whose product lines account for 50 percent of all sales. FIND/SVP also reports that Campbell Soup recently acquired *Open Pit* brand which accounts for 12 percent of sales. Hunt-Wesson's *Hunt* brand has a 10 percent share, and H.J Heinz Company has 7 percent. Durkee-French Foods (*Chris & Pitts* brand) and Geo. A. Hormel (*Old Smokehouse* brands) each have a three percent share of the market. Clorox Company has a somewhat new entry into the market, *K.C. Masterpiece*, and holds a two percent share, according to FIND/SVP.

The largest segment of the ethnic foods market and the ethnic sauce market is Italian food, according to Business Trend Analysts, which reports that Italian sauces are fourth in sales among all ethnic foods. The market for Italian sauces reported by BTA for 1987 was $766.3 million as compared with 1986 sales of $705.0. Italian sauce was 12% of total manufacturers' sales in 1987.

Sauces, dressings, and condiments
(dollar value in millions at retail)

	1986	1987	% change
Mayonnaise	$658	$630	-3.7%
Spoonable Dressings	$401	$390	-1.9%
Pourable Dressings	$673	$683	+.7%
Low/Reduced Calorie Dressings	$146	$170	+13.0%
Ketchup	$515	$500	-2.6%
Prepared Mustard	$184	$186	+1.1%
Meat Sauce	$204	$219	+5.5%
Italian Food Sauce	$893	$971	+7.4%
Liquid Gravies, Sauces	$170	$182	+5.8%
Dry Gravies, Seasoning, Sauces and Mix	$328	$354	+5.8%

Source: Selling Areas-Marketing/Burke, Inc., New York, NY

Spaghetti sauce is the largest category within this market, accounting for 88.1% of industry sales. FIND/SVP reports Chesebrough-Pond's *Ragu* as the industry leader commanding almost 50 percent of the market. Campbell Soup's *Prego* lines are in second place with 25 percent of the market share. Prince Company (*Prince* and *Classico* brands) has about 10 percent of the market.

Nontomato sauces account for 9.0% of sales, while pizza sauce accounts for 2.9% of sales. Trends in this market include introductions of premium and superpremium products and nontomato sauces.

Cajun and Creole foods have become the fastest growing new areas of the ethnic foods market. BTA indicates several large processors have jumped on the Cajun/Creole sauce bandwagon and introduced many new products in test markets in 1987. Kraft has test-marketed the "Makin'Cajun" line of sauces such as Creole, Spiced Brown, Barbeque and Spaghetti sauces. McCormick and Co. has introduced "Brennan's of New Orleans," a line which can be used for dessert toppings, hot sauces and seasonings.

The low calorie/reduced calorie dressing market saw the largest increase in sales in the dressing and sauce segment. SAMI/Burke reports the sales of these items to be $170 million in 1987 as compared to $146 million in 1986, a 13% increase. On the other hand, spoonable dressings experienced a loss of 1.9%.

STATE OF THE FOOD INDUSTRY

NON—ALCOHOLIC BEVERAGES

The value of bottled and canned soft drinks industry shipments rose 6.2 percent in 1987 to $21.8 billion. Since 1980, per capita consumption of soft drinks has been rising about 3.4 percent yearly and was forecasted to reach 47.6 gallons in 1987, according to the Department of Commerce (DOC).

Over the past two years, many local and regional bottling companies were sold. Changes in income tax treatment of capital gains resulted in about 100 bottling companies, mainly of Pepsi and Coca-Cola, selling their businesses to other bottlers.

According to the industry observers, DOC says, the combined owned and operated local bottling operation of Coca-Cola and Pepsi accounts for $6 billion (wholesale) of soft drinks annually or 30 percent of soft drink bottler shipments.

Seven-Up tried to boost sales in 1987 by introducing its new product, *Cherry Seven-Up*. The product was a success, and the company reported a 25 percent increase in sales, solely because of this new product introduction.

Coke and Pepsi fought out the rights to have their products on tap at Burger King. After a lot of media hoopla, Pepsi's contract was renewed. At the present time, Coke has about 60 percent of fountain sales, according to DOC, and Pepsi has about 25 percent. Fountain sales are important to the soft drink companies because of brand loyalty and the increase in the market as more people eat meals away from home.

Pepsi introduced *Jake's Cola*, hoping to get a larger market share in the soft drink segment, and banking on the appeal to a less strict calorie counter. This reduced calorie drink contained 30 calories, but the product never caught on.

The overall outlook is good for the soft drink industry with a projected 4.2 growth for 1988. The National Softdrink Association claims that each American consumed approximately 43 gallons in 1986.

Since many people are deciding not to drink tap water, because of taste, or a false notion of contaminated tap water which is really safe, the bottled water market could double in the next decade. Consumption of bottled water grew 26 percent in 1987, according to SAMI, Inc. New York, NY. A survey taken in 1984, showed that a quarter of California homes used bottled water. While the consumption of bottled water is mainly East or West Coast, studies also show that the college-educated, 25-54 age group is also most likely to purchase bottled water.

While most of the players in bottled water are small, local companies, more large companies are entering the fray. McKesson has about 11 percent of the market, and Anheuser Busch is getting more involved, especially with flavored seltzers. Perrier, the number one imported bottled water company, acquired Arrowhead Drinking Water Company, one of the largest brands, from Beatrice last year.

Total sales of fruit and vegetable juice and drinks exceeded $8.5 billion in 1987, an increase of 8.5 percent over the previous year. Fruit drink sales increased 14 percent annually since 1980 and now have a 39 percent market share. Tomato and vegetables juice now only have 3.1 percent of the market. Unit sales of chilled orange juice outperformed all other segments of the orange juice market during 1987 and was up 15 percent. Frozen orange juice was up 6 percent, while canned orange juice was down one percent, according to DOC.

Sales of non-alcoholic beverages

	1987	change from 1986
Juices		
Tomato and Fruit	$1.885 billion	+3.4%
Concentrate	$1.607 billion	+12.4%
Soft drinks	$32.908 billion*	+4.5%*
Powdered drinks	$72 million	-10.3%
Bottled water	$367 million	+26.2%
Non-alcoholic beer	$7.8 million	not available
Iced tea mixes	$320 million	-8.6%

*estimated
Source: SAMI, New York, NY; Beverage World, New York, NY; National Soft Drink Association, Washington, DC.

In addition to excellent sales in soft drinks, Coca-Cola introduced a 100 percent fruit juice line extension to its popular Hi-C line. The product is designed to appeal to children's taste, but satisfy parents requirements for nutrition.

Coke was also the first company to introduce an aspartame sweetened fruit drink in the U.S. The Minute Maid line of *Light n' Juicy* was introduced early in 1987.

Also introduced by Coca-Cola Foods in 1987 was *Minute Maid Squeeze Fresh*, a frozen juice concentrate in a squeeze bottle. Positioned as a convenient alternative for chilled juice, the product was aimed at the single serving market which is becoming increasingly important in all segments of the food industry as lifestyles are changing (especially more working women). Test-marketed last summer and fall, the makers claim it will stay fresh in the refrigerator up to five weeks.

Juicy Juice, from Nestle, leads the pack of juice blends, while Kool Aid continues to dominate the powered drink mix market, greatly outdistancing Wyler's and Crystal Light.

Flavored and sweetened seltzers or sparkling waters are growing in popularity, with sales in some sectors up 50 percent (see *FE*, April 1988, p.160). Although the market is greatly expanding, at the present time this segment of the soft drink industry is very small. This category is aimed at older drinkers who want a more healthy drink that contains less sugar, but is still fun to drink.

STATE OF THE FOOD INDUSTRY

FROZEN FOODS

Shipments in the frozen food industry rose 7.8 percent (3.5 percent adjusted for price change) in 1987, according to the U.S. Department of Commerce (DOC). Frozen specialty products were up 4.3 percent, and frozen fruit and vegetable production rose about 2.5 percent.

Low calorie, quality frozen entrees and dinners continue to be popular with consumers, but growth in sales in this segment of the industry is increasing at a slower rate than in previous years.

DOC predicts a 2.5 percent growth in frozen food shipments for next year caused by continued demand for low calorie, high nutrition frozen entrees.

The demand for these convenient and nutritious foods is due to several factors that are changing how and what Americans eat. As in many other segments of the food industry, more and more women and working mothers are entering the workplace, two family incomes and single parent households are on the rise, and people are having fewer children. Microwave ovens have invaded 60 percent of American homes and 50 percent of workplaces. The convenience of frozen foods cooked in the microwave is invaluable to these busy people. This coupled with changing lifestyles has made its mark on frozen foods, especially entrees and dinners.

The market for prepared frozen foods has prospered over the past several years, according to Find/SVP, New York, NY. Changing lifestyles and demographics, specialized products lines and widespread use of microwave ovens have all contributed to the market's growth, although the overall growth of frozen foods markets is now beginning to decelerate, Find/SVP says.

Frozen dishes have retained their popularity, in part because traditional single earner families are on the decline in the U.S. But while statistics show that consumers have indeed been purchasing more frozen foods, many have been the new upscale or premium products such as low calorie dinners and entrees, breakfast food and frozen soups. Since these products cost more than the standard TV dinners, frozen pizza, and pot pies, they tend to give a false impression of real growth for frozen food, according to Find/SVP. Some of the upscale or gourmet frozen food lines introduced this past year include: *Green Giant Microwave Garden Gourmet* from Pillsbury featuring premium vegetables and pasta or rice in a variety of sauces; and Stouffer's addition of four new items to its line of *Dinner Supreme*–Chicken Parmigiana, Veal Parmigiana, Turkey Divan and Chicken Monterey.

According to an American Frozen Food Institute report, the increased use of frozen foods and the growth of microwave ovens are trends that have been feeding on each other. Preparing frozen entrees ranked in the top five uses (out of sixteen) for microwave uses, according to a survey by Consumer's Union. And while half of U.S. workers have access to a microwave oven, two-thirds of those who have access use them to prepare lunch.

But are consumers happy with the frozen entrees? Not exactly. Consumers like the convenience of frozen entrees, but are not thrilled by the taste, healthfulness and quality of prepared frozen foods, according to a poll by the Consumer Network.

Sales of selected frozen foods
(In millions of dollars)

	1987	change from 1986
Meat	$154	-3.9%
Fish	$1,000	+13.5%
Mexican dishes	$263	+25.2%
Mexican dinners	$97	+8.4%
Oriental dishes	$223	-17.1%
Oriental dinners	$47	-32.0%
Vegetables with butter sauces	$76	+3.7%
Vegetables with cheese sauce	$94	+20.5%
Vegetables without cheese sauce	$95	0
International vegetables	$126	+7.5%

Source: SAMI, New York, NY.

And frozen foods are beginning to feel the pinch of the ever popular fast food restaurants, as well as in-store delis, bakeries, fish counters and salad bars.

With the rise in single households and the trend towards families on the go, single serve frozen items may be on the rise. Also, some families are not eating as many meals together.

One new item in the single serve category is *Zappetites*, a product made specifically for the microwave oven. This line from Oscar Mayer includes Chicken Nuggets, Italian Pizza Bread and Mexican Style Stuffed sandwich.

The frozen pizza industry, with many lines including single serve or "pizza for two," is worth $1 billion alone. Competition is tough and Pillsbury dominates the category with its assortment of lines and brands. And with most frozen pizzas microwaveable, this category is expected to grow. In 1987, Pillsbury introduced Totino's pan pizza and Totino's microwave pizza, each featuring a variety of toppings.

Product shipment of specialty frozen foods, adjusted for price changes, will grow about 5 percent in 1987, compared to an annual growth rate of 10 percent from 1982 to 1986.

As shown in the accompanying chart, sales of Mexican dishes were up 25 percent over 1986, according to SAMI, New York, NY. Sales of vegetables with cheese sauce were also popular and were up 20 percent. Oriental dinners took a dive in 1987 with sales dropping 32 percent.

STATE OF THE FOOD INDUSTRY

SEAFOOD

The U.S. seafood industry set a goal of 15 pounds per capita seafood consumption for 1987. And despite some skeptics predicting it was too ambitious of a goal, per capita seafood consumption in the U.S. reached 15.4 pounds in 1987. But as demand for seafood climbed so did prices which had a detrimental effect on consumption.

"Towards the end of the year, the inevitable happened in many areas," explained Robert P. Brubaker, president of the National Fisheries Institute (NFI), at the annual NFI convention held last April in New York City. "Consumers began to resist the high price tags; movement in certain areas slowed as major foodservice and retail chains reduced or eliminated promotions."

Brubaker went on to point out that inventories have swelled causing a lowering in prices to the trade. The challenge ahead for the seafood industry is to rekindle consumer demand, and more importantly, the desire of the trade so that growth can continue.

Seafood offers potential for increased profits due to the large potential for value added items. In 1987, commercial fishermen and fish farmers harvested products which sold for $3.57 billion, according to Brubaker. Of that amount, about $450 million worth was transferred at sea to foreign processing vessels in joint venture operations and another $897 million worth was sent overseas as exports without any further processing. This left $2.22 billion worth which moved into the domestic market.

The $2.22 billion domestically caught seafood, combined with $1.92 billion of imported raw items such as shell-on shrimp, raw tuna and fish blocks, goes to wholesaling or further processing, Brubaker continued. At this point $4.18 billion in value is added to the seafood. About $763 million dollars of this production is exported, leaving $7.56 billion worth for sale in this country. In addition about $3.86 billion of completely processed seafood is imported.

The wholesale distribution stage again adds value, totaling $2.6 billion and these products are sold to the retail trade (supermarkets, seafood shops and the foodservice industry) for more than $14 billion, says Brubaker. Supermarket and foodservice establishments also added value.

"The end result is that U.S. consumers pay almost $29 billion for fish and seafood products—this figure represents a 17 percent increase from 1986 and a 27 percent increase from 1985," said Brubaker. "When one adds the value of export and joint venture sales, the total dollars generated by fishery products exceeds $30 billion."

Another way of looking at seafood consumption is to examine how frequently it was consumed. "Last year, American consumers on average ate fish or shellfish slightly more than once a week," points out Lee J. Weddig, executive vice president of NFI. "They ate fish on about 12-13 billion occasions...included were 5-6 billion tuna sandwiches and salads and about 1.5 billion fish sandwiches."

Two important areas of the seafood industry—especially in terms of expanding consumption—are surimi-based products and aquaculture. The future growth of the surimi industry will be partially dependent on labeling requirements. Currently, if a surimi-based product is nutritionally inferior to the product it resembles and is replacing, it must carry imitation labeling which has a negative connotation with consumers. The National Food Processors Association (NFPA) released a report last March on the nutritional equivalency of surimi. It concluded that surimi-based seafood analogs generally provide less nutrients than shellfish.

U.S. per capita seafood consumption (lbs.)

	1982	1983	1984	1985	1986	1987
Fresh/frozen	7.7	8.0	8.5	9.0	9.0	10.0
Canned	4.3	4.8	4.9	5.1	5.4	5.1
Cured	.3	.3	.3	.3	.3	.3
Total	12.3	13.1	13.7	14.5	14.7	15.4

Source: National Marine Fisheries Services

One alternative to the use of imitation labeling is to fortify the analogs (increasing the protein levels to that of shellfish may impact the textural properties, though); another would be the approval of a regulation allowing a common or usual name for these products which the FDA would consider if a lack of feasibility to fortify could be shown. Currently, the NFI surimi committee is drafting a petition requesting the use of "surimi seafood" as a common or usual name for surimi-based seafood analogs.

Limited supplies of popular species of seafood has lead to the increasing importance of aquaculture. In 1987, 14 percent of U.S. seafood consumption was from aquaculture products. The U.S. has both catfish and trout aquaculture industries firmly in place, with ongoing efforts to develop and/or expand a number of others such as salmon, shrimp, and mussel aquaculture ventures. A major effort is underway (with funding from the government) to develop large-scale shrimp farms in the U.S. since our 1987 deficit in shrimp was $1.2 billion—second only to oil.

While availability of seafood is critical to a increasing consumption, the most significant issue facing the seafood industry is thought by many to be quality control. Pressure has been mounting to include seafood in government inspection programs. Although, a recent study of FDA activity in this area showed annual activity in the range of 870 to 1400 plant visits, 6000 sample collections, and 5000 warf exams. And, many major companies employ the National Marine Fisheries Service on a voluntary basis for more comprehensive inspection service. Despite a "belief that fish products are generally wholesome and safe," the industry does not advocate status quo, though. The NFI is working on a recommendation for improving government inspection of seafood and hopes to present it to Congress by early 1990.

Circle 53 or see FEM, p. 108 →